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Stable Ischemic Heart Disease

EXERCISE CAPACITY AND MORTALITY IN PATIENTS WITH ISCHEMIC LEFT VENTRICULAR DYSFUNCTION RANDOMIZED TO CORONARY ARTERY BYPASS SURGERY OR MEDICAL THERAPY: AN ANALYSIS FROM THE SURGICAL TREATMENT FOR ISCHEMIC HEART FAILURE TRIAL

Oral Contributions
Room 140 A
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Session Title: Stable Ischemic Heart Disease: Year in Review and Highlighted Clinical Studies
Abstract Category: 26. Stable Ischemic Heart Disease: Therapy
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Background: The importance of low exercise capacity in patients with ischemic left ventricular (LV) dysfunction evaluated for coronary artery bypass surgery (CABG) is uncertain.

Methods: Physical activity was assessed by questionnaire and 6-minute walk test in 1,212 patients with ischemic LV dysfunction before randomization to CABG (n=610) or medical management (n=602) in the Surgical Treatment for Ischemic Heart Failure (STICH) trial. During a median follow-up of 56 months (inter-quartile range [IQR] 48 to 68), total mortality (462 deaths) was compared by treatment allocation for subjects able (n=682) and unable (n=530) to walk 300m in 6 minutes and for patients with less (physical ability score [PAS] >55, n= 749) and more (PAS ≤55, n=433) limitation of physical activity by dyspnea and/or fatigue.

Results: Mortality was less for patients randomized to CABG compared to medical therapy who walked ≥300m (HR 0.77, 95% CI 0.59 to 0.99, p=0.038) with a PAS >55 (HR 0.79, 95% CI 0.62 to 1.01, p=0.061) or both (HR 0.71, 95% CI 0.52 to 0.97, p=0.033). Patients unable to walk 300m and/or with a PAS ≤55 had higher mortality during the first 60 days with CABG compared to medical therapy (30 [8.0%] versus 9 [2.5%], HR 3.24, 95% CI 1.64 to 6.83, p=0.002), and no benefit from CABG during total follow-up (HR 0.95, 95% CI 0.75 to 1.19). Statistical tests for interaction between treatment allocation and exercise groups were not significant.

Conclusion: Patients with ischemic LV dysfunction who have a low exercise capacity assessed by walk test or questionnaire are less likely to benefit from CABG compared to medical treatment only.